

**BEFORE**

**THE PUBLIC SERVICE COMMISSION OF**

**SOUTH CAROLINA**

**DOCKET NOS. 2018-321-E AND 2018-322-E**

<b>IN RE:</b>	Application of Duke Energy Carolinas, LLC	)
	For Approval of Proposed Electric Transportation	)
	Pilot and An Accounting Order to Defer Capital	)
	Capital and Operating Expenses	)
		)
		)
<b>IN RE:</b>	Application of Duke Energy Progress, LLC	)
	For Approval of Proposed Electric Transportation	)
	Pilot and An Accounting Order to Defer Capital	)
	Capital and Operating Expenses	)

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**COMMENTS OF THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF**

**I. INTRODUCTION**

The Office of Regulatory Staff (“ORS”) has reviewed the amended Applications submitted by Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”) (together the “Companies”) in the above referenced Dockets. The Companies seek approval from the Public Service Commission of South Carolina (“Commission”) for a proposed electric transportation (“ET”) pilot (“ET Pilot” or the “Pilot”) for a duration of three (3) years. The Companies seek accounting orders for regulatory and financial accounting purposes authorizing the Companies to defer in regulatory assets the related expenses until their next general rate cases following deployment of the ET Pilots. The amended Applications filed on April 1, 2019, request Commission approval of the Pilot with an effective date ninety (90) days from the date of Commission approval.

The ET Pilot is composed of separate Programs each designed to provide research and enhance the Companies' understanding of the effects of increasing adoption of ET charging infrastructure on a) the Companies' bulk electric system, b) the behavior of customers and c) the potential financial and environmental benefits to South Carolina. The Programs proposed by the Companies include:

- 1) Residential Electric Vehicle ("EV") Charging Program (DEC only);
- 2) EV School Bus Charging Station Program;
- 3) EV Transit Bus Charging Station Program; and
- 4) Direct Current ("DC") Fast Charging Station ("DCFC") Program.

The amended Applications filed by the Companies on April 1, 2019, modify the combined total cost estimate for the ET Pilots from approximately \$10.4 million to \$14.5 million over the Pilot's proposed initial three (3) years. The modification in cost estimate for the DEC ET Pilot is an increase from \$7.1 million to \$9.8 million. The modification in cost estimate for DEP is an increase from \$3.3 million to \$4.7 million. The Companies submitted amended Applications in response to stakeholder recommendations and feedback received through the Stakeholder Working Group process. Through the amended Applications, the Companies modified the EV School Bus and DCFC Programs and proposed to evaluate load management methods to include time-of-use rates.

## **II. SUMMARY OF COMMENTS**

As EV use across the United States increases and additional charging stations are installed for personal and public use, there will be impacts to the electric grid. As discussed in the Stakeholder Working Group, South Carolina does not currently have policy to guide the utility

related to electrification.<sup>1</sup> ORS researched public utility commission and legislative activity across the country regarding ET Pilot programs and state and regulatory policy and reviewed the comments filed by interveners and others in these dockets, as well as the discussion topics and concerns documented during the stakeholder process and South Carolina's current regulatory policy regarding cost recovery and distributed energy resources ("DER") under Act 236. ORS's comments and recommendations below reflect its mission to represent the concerns of the using and consuming public with respect to public utility services, regardless of class of customer, and preservation of continued investment in and maintenance of utility facilities to provide reliable and high-quality utility services. ORS provides the following comments and recommendations to the Commission for consideration in these Dockets.

**A. Companies Request for Deferral Accounting and Cost Recovery**

The Companies request accounting orders for regulatory and financial accounting purposes to authorize the companies to defer in a regulatory asset the related depreciation expense, property tax and incremental operations and maintenance expenses, as well as carrying cost on the investment and on the deferred costs at its weighted average cost of capital for the ET Pilots until the next general rate case. According to the Companies, this would match expenses with revenue. In the amended Applications, the Companies indicate that should the Commission not approve the request for a deferral, the Companies would need to reevaluate its offerings, if any, under the proposed ET Pilot.

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<sup>1</sup> Docket Nos. 2018-321-E and 2018-322-E Report of the Office of Regulatory Staff filed on April 1, 2019, Appendix H.

ORS recommends the Commission deny the Companies' request for an accounting order and require the Companies to explain why cost recovery under a Commission-approved DER program is not sufficient for this initiative prior to making a determination in these Dockets. The Companies are allowed cost recovery for ET programs under Act 236 DER Program, which can include "investment in technologies that enhance load management including, but not limited to, electric vehicle charging and energy storage."<sup>2</sup> The annual recovery caps prescribed in S.C. Code Ann. § 58-39-150 limit the amount customers can be charged each year to \$12 for Residential, \$120 for Commercial, and \$1,200 for Industrial customers. Under Act 236, under collected incremental costs will earn carrying costs until the following annual fuel review when costs are reallocated by customer class. Act 236 does not prohibit the Companies from investing in distributed energy resources outside of a DER Program and seeking recovery of those costs under generally applicable ratemaking principles and procedures.<sup>3</sup> Should the accounting orders be approved by the Commission, ORS fully reserves its rights to address the reasonableness of actual ET Pilot costs including the carrying costs in subsequent general rate cases or other proceedings.

#### **B. Residential EV Charging Program**

ORS supports the Residential EV Charging Program for DEC as the Pilot is focused investment in utility infrastructure for emerging technologies that may increase the reliability of the grid and ensure better access to high quality utility services. The Residential EV Charging Program and estimated costs were not modified in the amended Application. The proposed DEC Residential EV Charging Program provides residential customers a rebate up to \$500 for the

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<sup>2</sup> See S.C. Code Ann. § 58-39-130 (B)(4).

<sup>3</sup> See S.C. Code Ann. §, 58-39-130 (A)(5).

purchase of customer owned Electric Vehicle Supply Equipment (“EVSE”) that meets the requirements specified in the proposed tariff. Customers will also receive from DEC \$41.61 on a quarterly basis in exchange for allowing the Company load management capability of vehicle charging during certain hours of the day. The proposed estimated costs for this program are \$400,000. Pursuant to the cost recovery recommendations in Section A, ORS fully reserves its rights to address the reasonableness of the actual costs in a subsequent general rate case or other proceeding.

### **C. EV School Bus Charging Station Program**

In the amended applications, the Companies propose to increase EV School Bus Program rebates per-school bus from \$125,000 to \$265,000 and reduce the total buses incentivized from twenty to ten in DEC, and ten to five in DEP. The proposed costs for the EV School Bus Program, as reflected in the amended Application, is \$2.65 million for DEC and \$1.325 million for DEP – a total cost of \$3.975 million. The original Applications filed by the Companies reflected an estimated cost for the EV School Bus Charging Station Program of \$2.54 million for DEC and \$1.27 million for DEP – total estimated cost of \$3.81 million. The Companies’ proposal also requires that electric school buses incentivized under this program have a minimum range of one hundred (100) miles per the recommendations by the stakeholder working group.<sup>4</sup>

ORS recommends investments under the EV School Bus Charging Station Program be limited to the following areas: 1) rebates to Department of Education (“DOE”) or school districts designated for procuring and installing the charging stations, and 2) investment in the installation of the hardware, from the Companies’ distribution systems to the customer, that readies the site

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<sup>4</sup> Docket Nos. 2018-321-E and 2018-322-E Report of the Office of Regulatory Staff filed on April 1, 2019, Page 5.

for a charger (an EV investment option referred to as “make-ready”). The Companies are well-suited to invest in grid-related infrastructure and as such, most utilities focus their electrification efforts on investments related to the cost to install the make-ready infrastructure and incentives offered to customers to purchase and install the EV chargers.

However, incentives proposed by the Companies focused on the purchase of the electric school bus are unique and should not be funded by customers absent a clear policy directive. Other alternative incentive options exist that may be less costly to customers such as on-bill financing offered by a utility to the school district to assist in the purchase of electric vehicles or EVSE.

ORS recommends the Commission require the Companies to focus the funding on: 1) rebates to DOE or school districts designated for procuring and installing the charging stations, and 2) investment in the installation of the hardware, from the Companies’ distribution systems to the customer, that readies the site for a charger. As the cost impact of an amended program is unknown and based on the cost recovery recommendations in Section A, ORS fully reserves its rights to address the reasonableness of the actual costs in a subsequent general rate case or other proceeding.

#### **D. EV Transit Bus Charging Station Program**

ORS supports the EV Transit Bus Charging Station Program as proposed by the Companies because the Pilot is focused on investments in utility infrastructure for emerging technologies, which may increase the reliability of the grid and ensure better access to high quality utility services. The proposed EV Transit Bus Charging Station Program provides non-residential customers, which operate a commercial transit system utilizing one or more electric vehicle transit buses, a rebate up to \$55,000 for the installation of EVSE per electric vehicle transit bus operated by

the customer. The original Applications filed by the Companies reflected an estimated cost for the EV Transit Bus Charging Station Program of \$1.14 million for DEC and \$570,000 for DEP – total estimated cost of \$1.71 million.

ORS supports a rebate to incent customers to purchase and own EVSE in exchange for allowing the Company to install special equipment to monitor charging characteristics and implement load management capabilities. To support the ORS recommendation, the language in the proposed tariff should be amended. Currently, the Incentives Section of the proposed tariff states, “Company shall pay a participant up to \$55,000 per **full-size bus for the procurement, delivery, and installation of a transit bus and** associated Electric Vehicle Supply Equipment (EVSE).”<sup>5</sup> (emphasis added). The Companies do not intend to provide an incentive for the purchase of an EV transit bus. Therefore, ORS recommends the tariff language be amended to read, “Company shall pay a participant up to \$55,000 per associated Electric Vehicle Supply Equipment (EVSE).” Based on the cost recovery recommendations in Section A, ORS fully reserves its rights to address the reasonableness of the actual costs in a subsequent general rate case or other proceeding.

#### **E. DC Fast Charging Station (“DCFC”) Program**

ORS supports approval of the DCFC program as originally proposed by the Companies with an estimated cost of \$2.61 million for DEC and \$1.3 million for DEP. However, the Companies, in the amended Applications, propose to expand the scope and funding amount of the public DCFC Programs from twenty (20) to forty (40) in DEC and ten (10) to twenty (20) in DEP,

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<sup>5</sup> Docket 2018-321-E Original Application filed on October 10, 2018, Exhibit D; Docket 2018-322-E Original Application filed on October 10, 2018, Exhibit C.

for a new total of sixty (60) as opposed to the original thirty (30). While stakeholders discussed expansion of the DCFC Program, the expansion was not among the three (3) subjects for which stakeholders recommended modification of the Companies ET Pilot Program.<sup>6</sup> The original estimated costs for this program were \$2.61 million for DEC and \$1.3 million for DEP for a total of \$3.91 million. The Company proposed an increase to \$5.22 million for DEC and \$2.61 million for DEP for a total of 7.83 million, a 100% increase from the original amount sought, to accommodate the additional charging stations proposed in the amended application. The Companies include revisions to the program tariffs in the amended Application to reflect the proposed modifications.

ORS recommends the Commission require a cost-benefit analysis for the expansion of the DCFC program as reflected in the amended Applications and approve the DCFC program as originally proposed. Accordingly, the Companies may apply for approval for expanding the DCFC program after producing a cost-benefit analysis for review by the Commission. Based on the cost recovery recommendations in Section A, ORS fully reserves its rights to address the reasonableness of the actual costs in a subsequent general rate case or other proceeding. In addition, ORS offers these comments regarding the model proposed by the Companies for utility ownership of DCFC's.

#### **Lack of Cost-Benefit Analysis**

The Companies have not demonstrated that the expanded utility ownership model for the DCFC Program from thirty (30) to sixty (60) at a cost increase of 100% is reasonable and beneficial to the Companies' customers. The Companies provided no cost-benefit analysis for the proposed

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<sup>6</sup> Docket Nos. 2018-321-E and 2018-322-E Report of the Office of Regulatory Staff filed on April 1, 2019, Page 5.



DCFC Program; however, ORS recognizes that the Companies need the opportunity to pilot and learn from this program. The lack of cost-benefit analysis and identification of tangible benefits for customers is concerning considering the Companies' request to be allowed to recover all costs of the DCFC and other ET Pilots from customers and a 100% increase from the amount originally sought for DCFC. ORS was unable to determine the basis for the 100% increase. Customers should not bear all the cost and risk of the expanded DCFC Program investment.

### **Other DCFC Program Options**

As demonstrated in comments filed by ChargePoint and in research conducted by ORS, several other models exist to facilitate deployment and investment in DCFC including installation of make-ready infrastructure and rebates for customer owned DCFC. The make-ready infrastructure model includes utility investment in infrastructure and equipment from the utility's distribution system to the customer. There are models for utility financing of customer owned DCFC, which have been approved in some state jurisdictions and reduce customer investments in non-utility assets.<sup>7</sup> On-bill financing was discussed during the stakeholder process and determined to be a policy issue that will be addressed during the Energy Office policy stakeholder working group scheduled later this year.<sup>8</sup> The Companies did not provide analysis to demonstrate the DCFC Program proposed in the Application provided greater benefit to the Companies' customers as compared to other alternatives.

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<sup>7</sup> <https://www.energy.gov/eere/slsc/bill-financing-and-repayment-programs>.

<sup>8</sup> See Docket Nos. 2018-321-E and 2018-322-E Report of the Office of Regulatory Staff filed on April 1, 2019, Appendix H.

### **Competition and Flexible Rate Design**

ORS agrees with comments from other stakeholders that the DCFC Program should allow for competition and more flexibility in rate design. If the Companies double the number of utility-owned DCFC in the ET Pilot Program, it may discourage cost-effective investment by the private sector. This competition and private investment would reduce the amount to be subsidized by the Companies' customers. Furthermore, the current pricing for DCFC may provide the Companies with a competitive edge in the marketplace because the Companies can charge an end-user per kilowatt hour. Competitors in the DCFC marketplace are limited to charging the end-user a fee for services akin to metered parking or providing access to the DCFC as a free service to the customers of a retail establishment or workplace.

#### **F. Other Stakeholder Recommendations adopted by the Company**

The Companies' amended Applications include non-program related recommendations based on feedback from stakeholders. These recommendations include proposals to evaluate load management methods, to include time of use rates, and an ongoing stakeholder engagement process. ORS recommends the Commission approve these amendments to the Companies' applications.

### **III. CONCLUSION**

Wherefore, the ORS respectfully requests the Commission consider and adopt the recommendations discussed herein to assess the impacts of electrification on the distribution infrastructure, ensure the Companies continue to provide high quality and reliable electric service, and minimize the cost impacts to all classes of customers.

[SIGNATURE ON FOLLOWING PAGE]

Dated this 20th day of May 2019.

A handwritten signature in blue ink, appearing to read 'A. M. Bateman', with a long horizontal flourish extending to the right.

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